

Amendments to the Claims

1. (Currently amended) An apparatus of recording a ~~digital television broadcast~~an input signal, comprising:

a demodulator demodulating a ~~received digital broadcast~~an input signal into data streams of individual channels;

a data processor extracting data stream of a channel chosen among the individual channels and converting the extracted data stream to transport stream;

a stream analyzer analyzing data of the transport stream, and extracting and creating data stream- and/or recording-related information; and

a writing means writing information from said stream analyzer and the transport stream from said data processor to a recording medium in a format suitable to the extracted and created information,

wherein said writing means calculates time length of each high-density stream object unit based on presentation time stamp, which is one of the extracted information from said stream analyzer, and writes the calculated time length as navigation data.

2. (Original) The apparatus set forth in claim 1, wherein said stream analyzer analyzes each header of transport packets forming the transport stream to obtain said data stream- and/or recording-related information.

3. (Original) The apparatus set forth in claim 1, wherein said stream analyzer reconstructs the transport stream into MPEG-formatted stream and analyzes MPEG header of the MPEG-formatted stream to obtain said data stream- and/or recording-related information.

4. (Original) The apparatus set forth in claim 1, wherein said writing means writes the transport stream to the recording medium such that all high-density stream object units begin from starting data of a GOP based on the data stream- and/or recording-related information.

5. (Original) The apparatus set forth in claim 1, wherein said data stream- and/or recording-related information is for trick play.

6. (Original) The apparatus set forth in claim 5, wherein said writing means writes the information for trick play in an only first pack of each high-density stream object unit.

7. (Original) The apparatus set forth in claim 6, wherein said writing means writes the information for trick play before the transport stream to be recorded in the first pack.

8. (Original) The apparatus set forth in claim 1, further comprising an interfacing unit transmitting the transport stream outputted from said data processor to an external apparatus.

9. (Cancel)

10. (Original) The apparatus set forth in claim 1, further comprising a converter decodes the transport stream outputted from said data processor to analog video and audio signal, and outputs the analog video and audio signal to an external apparatus.

11. (Original) A method of recording a ~~digital television broadcast~~an input signal, comprising ~~the steps of~~:

(a) demodulating a ~~received digital broadcast~~an input signal into data stream and extracting transport stream belonging to a chosen channel among the demodulated data stream; and

(b) analyzing data of the transport stream, extracting and creating data stream- and/or recording-related information, and writing the data stream- and/or recording-related information and the transport stream to a recording medium in a format suitable to the extracted and created information,

wherein said step (b) comprises calculating time length of each high-density stream object unit based on presentation time stamp, which is one of the extracted information, and writes the calculated time length as navigation data.

12. (Original) The method set forth in claim 11, wherein said step (b) analyzes each header of transport packets forming the transport stream to obtain said data stream- and/or recording-related information.

13. (Original) The method set forth in claim 11, wherein said step (b) reconstructs the transport stream into MPEG-formatted stream and analyzes MPEG header of the MPEG-formatted stream to obtain said data stream- and/or recording-related information.

14. (Original) The method set forth in claim 11, wherein said step (b) writes the transport stream to the recording medium such that all high-density stream object units begin from starting data of a GOP based on the data stream- and/or recording-related information.

15. (Original) The method set forth in claim 11, wherein said data stream- and/or recording-related information is for trick play.

16. (Original) The method set forth in claim 15, wherein said step (b) writes the information for trick play in an only first pack of each high-density stream object unit.

17. (Original) The method set forth in claim 16, wherein said step (b) writes the information for trick play before the transport stream to be recorded in the first pack.

18. (Original) The method set forth in claim 11, wherein said information for trick play includes location information of Infra-coded and predictive pictures.

19. (Original) The method set forth in claim 11, wherein said information for trick play consists of the number of GOPs and location information of each GOP.

20. (Cancel)

21. (New) An apparatus of recording an input signal, the apparatus comprising:
a demodulator demodulating an input signal transmitted on over multiple paths;
a data processor choosing a first path from among the multiple paths and converting the input signal to a transport stream;
a stream analyzer analyzing data of the transport stream, and extracting and creating data stream- and/or recording-related information; and
a writing means writing information from said stream analyzer and the transport stream from said data processor to a recording medium in a format suitable to the extracted and created information,
wherein said writing means calculates time length of each high-density stream object unit based on presentation time stamp, which is one of the extracted information from said stream analyzer, and writes the calculated time length as navigation data.

22. (New) The apparatus set forth in claim 21, wherein said stream analyzer analyzes each header of transport packets forming the transport stream to obtain said data stream- and/or recording-related information.

23. (New) The apparatus set forth in claim 21, wherein said stream analyzer reconstructs the transport stream into MPEG-formatted stream and analyzes MPEG header of the MPEG-formatted stream to obtain said data stream- and/or recording-related information.

24. (New) The apparatus set forth in claim 21, wherein said writing means writes the transport stream to the recording medium such that all high-density stream object units begin from starting data of a GOP based on the data stream- and/or recording-related information.

25. (New) The apparatus set forth in claim 21, wherein said data stream- and/or recording-related information is for trick play.

26. (New) A method of recording an input signal, the method comprising:

demodulating an input signal into a data stream and extracting a transport stream belonging to a chosen path among the demodulated data stream; and

analyzing data of the transport stream, extracting and creating data stream- and/or recording-related information, and writing the data stream- and/or recording-related information and the transport stream to a recording medium in a format suitable to the extracted and created information,

wherein said analyzing comprises calculating time length of each high-density stream object unit based on presentation time stamp, which is one of the extracted information, and writes the calculated time length as navigation data.

27. (New) The method set forth in claim 30, wherein each header of transport packets forming the transport stream is analyzed to obtain said data stream- and/or recording-related information.

28. (New) The method set forth in claim 26, wherein said step (b) reconstructs the transport stream into MPEG-formatted stream and analyzes MPEG header of the MPEG-formatted stream to obtain said data stream- and/or recording-related information.

29. (New) The method set forth in claim 26, wherein said step (b) writes the transport stream to the recording medium such that all high-density stream object units begin from starting data of a GOP based on the data stream- and/or recording-related information.

30. (New) A method of reproducing a signal from a recording medium, the method comprising:

reading a data from a recording medium;

analyzing the data to reproduce a signal for a transport stream;

transmitting the signal over a transport stream in a first path; and
modulating the transport stream into a data stream transmitted over multiple paths;
wherein said analyzing comprises calculating time length of each high-density stream
object unit based on presentation time stamp, wherein the the calculated time length is written as
navigation data.